#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

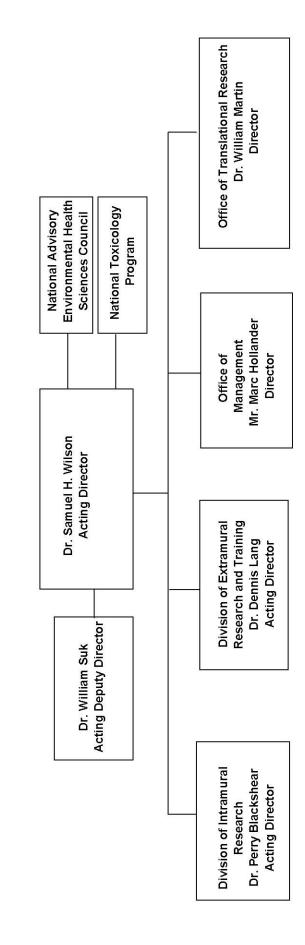
#### NATIONAL INSTITUTES OF HEALTH

#### National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities

FY 2009 Budget	<u>Page No.</u>
Organization chart	2
Appropriation language	3
Amounts available for obligation	4
Budget mechanism table	5
Budget authority by program	6
Major Changes in Budget Request	7
Summary of changes	8
Budget Graphs	9
Justification narrative	10
Budget authority by object	15
Salaries and expenses	16
Authorizing legislation	17
Appropriations history	18
Summary NIH tables.	19

NATIONAL INSTITUTES OF HEALTH
National Institute of Environmental Health Sciences

Organization Structure



National Institute of Environmental Health Sciences
Department of Interior and Related Agencies Appropriations
Superfund-Related Activities

For necessary expenses for the National Institute of Environmental Health Sciences in carrying out activities set forth in section 311(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, and section 126(g) of the Superfund Amendments and Reauthorization Act of 1986, [\$78,887,000] \$77,546,000 (Department of the Interior, Environment and Related Agencies Appropriation Act, 2008).

#### **National Institutes of Health**

## National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities

#### Amounts Available for Obligation 1/

Source of Funding	FY 2007 Actual	FY 2008 Enacted	FY 2009 Estimate
Appropriation	\$79,108,000	\$78,775,000	\$77,546,000
Pay cost add-on	9,000	0	0
Rescission	0	-1,229,000	0
Subtotal, adjusted appropriation	79,117,000	77,546,000	77,546,000
Subtotal, adjusted budget authority	79,117,000	77,546,000	77,546,000
Unobligated balance lapsing	-6,000	0	0
Total obligations	79,111,000	77,546,000	77,546,000

<sup>1/</sup> Excludes the following amounts for reimbursable activities carried out by this account: FY 2007 - \$12,206,000 FY 2008 - \$14,000,000 FY 2009 - \$14,000,000

## National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities

(Dollars in Thousands)
Budget Mechanism - Total

		get Mechan				,		
		2007		2008		2009		
MECHANISM		ctual		acted		timate		nange
Research Grants:	No.	Amount	No.	Amount	No.	Amount	No. A	mount
Research Projects:								ļ
Noncompeting	23	\$43,704		\$39,050		\$34,327	-6	-\$4,723
Administrative supplements	(9)	333	(3)	190	(3)	190	(0)	0
Competing:								
Renewal	0	0	2	4,773	4	8,222	2	3,449
New	4	1,170	3	755	8	2,000	5	1,245
Supplements	3	143	0	0	0	0	0	0
Subtotal, competing	7	1,313	5	5,528	12	10,222	7	4,694
Subtotal, RPGs	30	45,350	29	44,768	30	44,739	1	-29
SBIR/STTR	11	2,330	10	2,069	10	2,067	0	-2
Subtotal, RPGs	41	47,680	39	46,837	40	46,806	1	-31
Research Centers:								ļ
Specialized/comprehensive	0	0	0	0	0	0	0	0
Clinical research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative medicine	0	0	0	0	0	0	0	0
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0
Subtotal, Centers	0	0	0	0	0	0	0	0
Other Research:								
Research careers	0	0	0	0	0	0	0	0
Cancer education	0	0	0	0	0	0	0	0
Cooperative clinical research	0	0	0	0	0	0	0	0
Biomedical research support	0	0	0	0	0	0	0	0
Minority biomedical research support	0	0	0	0	0	0	0	0
Other	18	26,048	18	25,544	18	25,520	0	-24
Subtotal, Other Research	18	26,048	18	25,544	18	25,520	0	-24
Total Research Grants	59	73,728	57	72,381	58	72,326	1	-55
Research Training:	<u>FTTPs</u>		<u>FTTPs</u>		<u>FTTPs</u>			_
Individual awards	0	0	0	0	0	0	0	0
Institutional awards	0	0	0	0	0	0	0	0
Total, Training	0	0	0	0	0	0	0	
Research & development contracts	1	1,456	1	1,500	1	1,500	0	0
(SBIR/STTR)	(0)	0,430	(0)	1,500	(0)	0	(0)	0
,	(0)	-	(0)	-	(0)	-	(0)	_
Intramural research		0		0		0		0
Research management and support		3,933		3,665		3,720		55
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
Total, NIEHS Superfund	0	79,117	0	77,546	0	77,546	0	0

FTEs are included in the NIEHS regular appropriation.

#### **National Institute of Environmental Health Sciences** Department of Interior and Related Agencies Appropriations Superfund-Related Activities

**BA by Program** (Dollars in thousands)

<u>Detail:</u> Superfund Research Worker Training	FY 2005 Actual Amount \$51,099 28,743	' '	+ ,	FY 2007 Comparable Amount \$50,635 28,482	FY 2008 Enacted Amount \$49,629 27,917	FY 2009 Estimate Amount \$49,629 27,917	Change Amount \$0 0
TOTAL	79,842	79,108	79,117	79,117	77,546	77,546	0

FTEs are included in the regular NIEHS appropriation.

#### **Major Changes in the Fiscal Year 2009 Budget Request**

Research Project Grants (RPGs) (-\$.031 million; total \$46.806 million): NIEHS will support a total of 40 RPG awards in FY 2009. Although the overall change in RPGs is small, noncompeting RPGs decrease by -6 awards and -\$4.723 million, while competing RPGs increase by 7 awards and \$4.694 million. The first Superfund Research Program (SRP) investigator-initiated awards, awarded in 2006, are expiring in 2008 and new investigator-initiated SRP awards will be made in 2009. The NIH Budget policy for RPGs in FY 2009 is to provide no inflationary increases in noncompeting awards and no increase in average cost for competing RPGs.

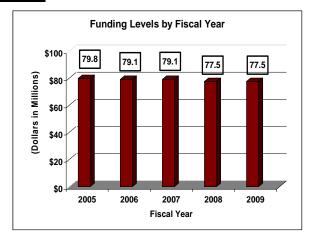
# National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities Summary of Changes

FY 2008 enacted FY 2009 estimated budget authority				\$77,546,000 77,546,000
Net change				0
		8 Current cted Base	Chan	ge from Base
		Budget	<u> </u>	Budget
CHANGES		Authority		Authority
A. Built-in:		-		
Research management and support:     a. Annualization of January				
2008 pay increase		\$1,405,000		\$12,000
b. January FY 2009 pay increase		1,405,000		31,000
c. One less day of pay		1,405,000		-5,000
d. Payment for centrally furnished services		99,000		1,000
e. Increased cost of laboratory supplies,				
materials, and other expenses		2,161,000		40,000
Subtotal				79,000
Subtotal, Built-in				79,000
B. Program:				
Research project grants:				
a. Noncompeting	24	39,240,000	-6 -	-4,723,000
<ul><li>b. Competing</li><li>c. SBIR/STTR</li></ul>	5 10	5,528,000	7	4,694,000
Total	10 39	2,069,000 46,837,000	0 1	-2,000 -31,000
		, ,		- 1,
2. Other research	18	25,544,000	0	-24,000
Research and development contracts	1	1,500,000	0	0
Subtotal, extramural				-55,000
Research management and support		3,665,000		-24,000
Subtotal, program		77,546,000		-79,000
Total changes				0

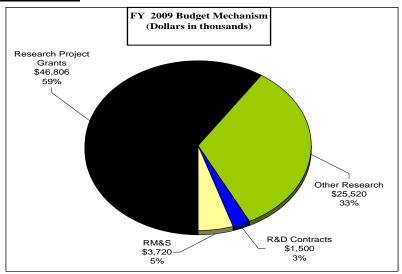
FTES are included with the regular NIEHS appropriation.

#### **FY 2009 Budget Graphs**

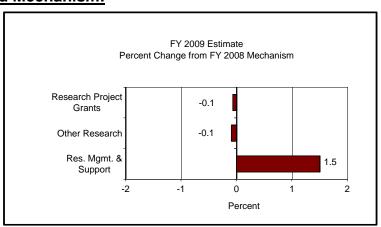
#### **History of Budget Authority:**



#### **Distribution by Mechanism:**



#### **Change by Selected Mechanism:**



#### **Justification of Budget Request**

#### National Institute of Environmental Health Sciences

Authorizing Legislation: Section 311(a) of the Comprehensive Environmental, Response, Compensation, and Liability Act of 1980, as amended, and Section 126(g) of the Superfund Amendments and Reauthorization Act of 1986

#### **Budget Authority:**

 FY 2007	FY 2008	FY 2009	Increase or
Actual BA	Enacted BA	Estimated BA	Decrease
\$79,117,000	\$77,546,000	\$77,546,000	

FTEs are included with the regular NIEHS appropriation.

#### **DIRECTOR'S OVERVIEW**

For 20 years NIEHS' Superfund Program has provided research and training that is the foundation of environmental protection.

Through an interdisciplinary and multidisciplinary research platform, the Superfund Research Program (SRP) identifies, assesses, and evaluates the potential health effects of exposure to hazardous waste and develops innovative chemical, physical and biological technologies for remediating sites contaminated by hazardous substances. Investigators from diverse fields study the underlying biological and environmental principles pertaining to the nation's most recalcitrant environmental problems.

SRP's accomplishments were demonstrated at the Program's recent national scientific meeting celebrating "20 Years of Success and a Vision for the Future." SRP's basic premise, that the reduction of environmental exposures through improved engineering and public education can minimize environmentally related diseases, was a significant focus of this meeting. Intervention strategies, based on the biological consequences of contaminant exposure, also have a role in reducing environmentally related diseases. Research presented at this meeting also exemplified how cutting edge scientific knowledge is incorporated into decisions related to risk, cleanup and public health through a better understanding of the links between exposure and basic biological mechanisms.

Another recurring theme at the meeting was the ways in which the health effects of exposures to contaminants can be modulated by nutrition. Preliminary findings suggest that different types of dietary fatty acids can either be protective against polychlorinated biphenyl-induced vascular alterations or can potentiate vascular changes that lead to atherosclerosis. Similarly, ascorbate (Vitamin C) has long been recognized as an

antidote for reducing the toxic effects of ingested chromium. New SRP studies demonstrate that when ascorbate enters the cell, it can act as a potent amplifier of chromium's damage to cellular DNA that could lead to an increased risk of developing cancer. This example demonstrates that a nutritional supplement can be both protective and harmful.

Another example of the association between nutrition and contaminant exposure is the finding that folate (a form of Vitamin B) supplements may reduce an individual's risk of arsenic-induced disease. Studies indicate that in some situations, nutrition may be a sensible means for mitigating the effects of exposure to toxic environmental insults. This research may lead to novel dietary recommendations at the national level for populations at risk, i.e., people residing near Superfund sites.

Environmental issues are also a critical part of disaster response. As part of the National Response Framework, Superfund's Worker Training Program (WTP) has played an active role in the federal response to significant disasters. In the aftermath of Hurricane Katrina, WTP developed a model training intervention that can now be used in future crises. For example, thousands of additional workers could be needed if a severe Avian Flu outbreak occurs in the poultry industry. WTP has laid the groundwork for training these workers by bringing the Department of Agriculture, FEMA and the Occupational Safety and Health Administration together for a planned response. The Program is also preparing materials and trainers for earthquakes, chemical disasters and a dirty bomb attack - response scenarios required by the President through the Department of Homeland Security.

WTP has worked across the country to keep America's cleanup workforce and emergency responders safe. During the past year, WTP funded training occurring in all fifty states, Puerto Rico and the Pacific Territories. Nearly 131,000 workers received training through nearly 8,000 classes. Training delivery stretched from Virginia, where numerous chemical emergency response courses were held, to the state of Washington, where basic Superfund Site worker training predominated; from Alaska, where training is available even in Barrow in the far north, to Mississippi, where the hazards of Katrina recovery are still being addressed.

#### JUSTIFICATION BY PROGRAM

#### **Program Descriptions and Accomplishments**

**Superfund Research Program (SRP)**: SRP's goal is to gain a better understanding of how exposure to toxicants affects human health in order to help environmental managers and risk assessors make sound decisions related to Superfund and other hazardous waste sites. SRP also develops cost effective approaches to detect contaminants in the environment and for removing or reducing the amount of toxic substances found at hazardous waste sites.

SRP is supporting "industrial ecology" approaches that eliminate pollution from industrial processes by integrating recycling at all stages of a product's life cycle - from acquisition of raw materials to reuse of parts/materials when the product no longer

functions – into creating new products that can break down or safely sequester toxic chemicals. In a newly developed process, grantees have created an iron-based cement-like substance using solid waste materials from sources such as open pit copper mines, coal-fired power plants, steel foundries, cement plants, and shot blasting facilities. An unexpected benefit of this process is that carbon dioxide, a primary greenhouse gas, is trapped in the cement matrix, thus reducing carbon dioxide emissions into the atmosphere. The resulting cement is stronger and more resistant to extreme environmental conditions, such as those found in seawater and other corrosive environments, than current commercially available products. Ongoing research is focused on testing this material's ability to permanently bind metal and organic contaminants found in the environment.

<u>Budget Policy:</u> The FY 2009 budget estimate for SRP is \$49.6 million, which represents the same level of funding as the FY 2008 enacted amount. Resources will be used to continue the support of high priority and scientifically rigorous multi-project research grants, covering the diverse areas of science needed to solve the complex health and environmental issues associated with the nation's hazardous waste sites. In addition, support will be continued for individual investigator grants to develop innovative approaches for the remediation of contaminated sediments. NIEHS also plans to initiate a new area of investigation in the development of nanotechnology based tools to understand the mechanisms of bioremediation. Support for SBIR grants will continue to develop innovative technologies for the monitoring and remediation of hazardous substances in the environment.

#### Portrait of a Program: Improved Screening Strategy

FY 2008 Level \$101,000 FY 2009 Level 101,000 Change 0

In FY 2007 SRP embarked on an exciting enterprise that draws from its past research investments, incorporates input from its stakeholders, i.e., Environmental Protection Agency (EPA) environmental practitioners, and promises to provide an improved screening strategy to detect harmful contaminants in sediments. Although only a small outlay is required in FY 2008 and FY 2009 to sustain this project, the major investment occurred over many years of grant support to seven individual research projects.

Contaminated sediments pose wide-ranging effects on human and ecological health, and contribute to the overwhelming cost required for site remediation. Costs to clean up just 11 of the 150 Superfund sites undergoing sediment remediation are expected to exceed \$50 million for each site.

SRP has sponsored research leading to the development of seven unique biological indicator assays. Combined, these assays have the potential for providing a battery of highly sensitive, cost-effective tests that can be used as screening tools for contaminants found in sediments. SRP investigators are now collaborating with EPA to use these assays in a tiered approach for the standardization of collection protocols and data integration. The hypothesis of this tiered approach is that <u>a battery of chemical</u>

<u>class specific bioassays or biomarkers can predict diminished sediment quality</u> <u>by assessing the biological impact of contaminants.</u> It is also anticipated that the bioassays proposed will be more sensitive, less expensive and require less time to conduct than the standard bioassays.

By combining the experience of EPA scientists and SRP researchers, the probability that the outcomes will be utilized by environmental managers is greatly increased. Culmination of these efforts is anticipated in FY 2010. If successful, this collaborative strategy can serve as a model for increasing the utility of SRP-funded research to solve the complex challenges of environmental exposures and clean up.

**Worker Training Program (WTP)**: WTP trains workers to protect themselves and their communities from exposure to hazardous materials encountered during hazardous waste operations, hazardous materials transportation, and environmental restoration of contaminated facilities or chemical emergency response. WTP works with a network of experienced worker safety and health experts, trainers, and support staff that can be mobilized to protect and assist during times of national crisis.

WTP provides model occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal or containment or chemical emergency response.

Dring on Alankon Training Augusta

Primary	/ vvorker i ra	iining Awards	
	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate
Amount (in Thousands)	\$26,048	\$25,544	\$25,520
Institutions	18	18	18
Classes	7,848	7,455	7,455
Workers Reached	131,037	124,485	124,485
Contact Hours	1,425,059	1,353,806	1,353,806

<u>Budget Policy:</u> The FY 2009 budget estimate for WTP is \$27.9 million, which represents the same level of funding as the FY 2008 enacted amount. Resources will be used to continue awards of WTP cooperative agreements to support ongoing (a) occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal, containment or chemical emergency response training activities, and (b) comprehensive training to disadvantaged urban youth in order to prepare them for employment in the construction and environmental cleanup fields. WTP will also continue to support small businesses through its innovative SBIR e-learning for worker safety and health training program. It will continue pursuing pre-deployment strategies and training materials development on a number of issues of key national response concern.

#### Portrait of a Program: Serving Spanish-Speaking Workers

FY 2008 Level \$700,000 FY 2009 Level 800,000 Change +100,000

During Fiscal Year 2009, WTP, while maintaining its core training missions, will undertake a significant expansion of its efforts to serve Spanish-speaking workers who are engaged in hazardous waste cleanup and emergency response. During the response to Hurricane Katrina, WTP learned that Hispanic workers are a particular at-risk population who experience high rates of occupational injury and death. Currently, WTP training programs reach thousands of Spanish-speaking workers each year with very good results. For example, at a hazardous materials class in Tucson conducted in Spanish, one woman said that she liked the class because she felt respected and for the first time that she had support. She added "...we feel better because we understand more and we can ask any questions we want and we learn more like that." These are lessons in the safe use of hazardous materials that Hispanic workers can use at work to protect themselves and take back to their homes and neighborhoods to protect their families. WTP, through its awardees, will augment the delivery of actual training in the field through targeted outreach and support for additional bi-lingual trainers. Access to many of these multi-lingual resources will continue to be available through the NIEHS website, and access to classroom and hands-on training will be available to employers and workers through WTP.

This program effort began in August 2006 and will be continued through July 2010

# National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities Salaries and Expenses Budget Authority by Object

		1		
		EV 0000	EV 0000	
	OD IFOT OLASSES	FY 2008	FY 2009	Increase or
	OBJECT CLASSES	Enacted	Estimate	Decrease
1,,,	Personnel Compensation:	¢4 000 000	¢4 067 000	¢47.000
11.1	Full-time permanent	\$1,020,000	\$1,067,000	\$47,000
	Other than full-time permanent	104,000	109,000	5,000
	Other personnel compensation	12,000	12,000	0
11.7	Military personnel	0	0	0
11.8	Special personnel services payments	1 126 000	1 100 000	52,000
10.0	Total, Personnel Compensation	1,136,000	1,188,000	52,000
12.0	Personnel benefits	269,000	281,000	12,000
12.2	Military personnel benefits	0	0	0
13.0	Benefits for former personnel	0	0	0
	Subtotal, Pay Costs	1,405,000	1,469,000	64,000
21.0	Travel and transportation of persons	150,000	155,000	5,000
22.0	Transportation of things	0	0	0
23.1	Rental payments to GSA	0	0	0
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities and miscellaneous charges	0	0	0
24.0	Printing and reproduction		0	0
25.1	Consulting services	23,000	23,000	0
	Other services	1,080,000	1,066,000	-14,000
25.2	Purchase of goods and services from	1,000,000	1,000,000	-14,000
25.5	government accounts	2,482,000	2,482,000	0
25.4	Operation and maintenance of facilities	2,402,000	2,402,000	0
25.5	Research and development contracts	0	0	0
25.6	Medical care	0	0	0
25.7	Operation and maintenance of equipment	0	0	o o
25.8	Subsistence and support of persons	0	0	0
25.0	Subtotal, Other Contractual Services	3,585,000	3,571,000	-14,000
26.0	Supplies and materials	11,000	11,000	0
31.0	Equipment	14,000	14,000	0
32.0	Land and structures	0	0	0
33.0	Investments and loans	0	0	0
41.0	Grants, subsidies and contributions	72,381,000	72,326,000	-55,000
42.0	Insurance claims and indemnities	0	0	0,000
43.0	Interest and dividends	0	0	0
44.0	Refunds	Ö	0	0
	Subtotal, Non-Pay Costs	76,141,000	76,077,000	-64,000
	Total Budget Authority by Object	77,546,000	77,546,000	0
	Total Budget Authority by Object	11,070,000	11,0-10,000	

FTEs are included with the regular NIEHS appropriation.

# National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities Salaries and Expenses

	· ·		
OBJECT CLASSES	FY 2008 Enacted	FY 2009 Estimate	Increase or Decrease
Personnel Compensation:	Enacioa	Louinato	Decircuse
Full-time permanent (11.1)	\$1,020,000	\$1,067,000	\$47,000
. , ,			•
Other than full-time permanent (11.3)	104,000	109,000	· ·
Other personnel compensation (11.5)	12,000	12,000	0
Military personnel (11.7)	0	0	0
Special personnel services payments (11.8)	0	0	0
Total Personnel Compensation (11.9)	1,136,000	1,188,000	52,000
Civilian personnel benefits (12.1)	269,000	281,000	12,000
Military personnel benefits (12.2)	0	0	0
Benefits to former personnel (13.0)	0	0	0
Subtotal, Pay Costs	1,405,000	1,469,000	64,000
Travel (21.0)	150,000	155,000	5,000
Transportation of things (22.0)	0	0	0
Rental payments to others (23.2)	0	0	0
Communications, utilities and			
miscellaneous charges (23.3)	0	0	0
Printing and reproduction (24.0)	0	0	0
Other Contractual Services:			
Advisory and assistance services (25.1)	23,000	23,000	0
Other services (25.2)	1,080,000	1,066,000	-14,000
Purchases from government accounts (25.3)	2,482,000	2,482,000	0
Operation and maintenance of facilities (25.4)	0	0	0
Operation and maintenance of equipment (25.7)	0	0	0
Subsistence and support of persons (25.8)	0	0	0
Subtotal Other Contractual Services	3,585,000	3,571,000	-14,000
Supplies and materials (26.0)	11,000	11,000	0
Subtotal, Non-Pay Costs	3,746,000	3,737,000	-9,000
Total, Administrative Costs	5,151,000	5,206,000	55,000

# NATIONAL INSTITUTES OF HEALTH National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities

L.		Authorizin	<b>Authorizing Legislation</b>			
	CERCLA/	U.S. Code	2008 Amount	FY 2008	2008 Amount	FY 2009
	SARA	Citation	Authorized	Enacted	Authorized	<b>Budget Estimate</b>
Environmental Profection	CERCI A	4289660	Cofinito		Cofinito	
		200081		s:		8
Agency's Hazardous	Section 311 (a)	1 (a) Section 9660(a)		\$49,629,000		\$49,629,000
Substance Superfund			人		^	2 12
1	SARA	42§9660				
	Section 126(g)	Section 9660(a)	Indefinite	27,917,000	Indefinite	27,917,000
Total, Budget Authority				77,546,000		77,546,000

## National Institute of Environmental Health Sciences Department of Interior and Related Agencies Appropriations Superfund-Related Activities

**Appropriations History** 

Fiscal	Budget Estimate	House	Senate	
Year	to Congress	Allowance	Allowance	Appropriation <u>1/2/</u>
2001 <u>2</u> /	\$48,526,700 <u>3/</u>	\$60,000,000	N/A <u>4/</u>	\$63,000,000
Rescission	0	0	0	-138,600
2002	70,228,000	70,228,000	70,228,000	70,228,000
Supplemental	0	0	0	10,500,000
2003	74,471,000	84,074,000	76,074,000	83,528,000
2004	78,744,000	80,000,000	78,774,000	78,774,000
Rescission				-465,000
2005	80,486,000	80,486,000	80,486,000	80,486,000
Rescission				-644,000
2006	80,289,000	80,289,000	80,289,000	80,289,000
Rescission				-1,181,000
2007	79,108,000	79,414,000	78,414,000	79,117,000
2008	78,434,000	79,117,000	78,434,000	78,775,000
Rescission				-1,229,000
2009	77,546,000			

 $<sup>\</sup>underline{1}/$  Reflects enacted supplementals, rescissions, and reappropriations.

<sup>2/</sup> Beginning in FY2001, NIEHS received a separate appropriation.

<sup>3/</sup> Estimate proposed by the Environmental Protection Agency.

<sup>&</sup>lt;u>4/</u> Senate version of the FY2001 VA-HUD appropriations bill did not include an appropriation for NIEHS' Superfund related activities.

NATIONAL INSTITUTES OF HEALTH FY 2009 President's Budget Request

				2009 PB.
Appropriation	FY 2007	FY 2008	FY 2009	*
	Actual 1/2/3/4/5/	Enacted 10/	President's Budget 1/	2008 Enacted
NCI	\$4,795,491,000	\$4,805,088,000	\$4,809,819,000	\$4,731,000
NHLBI	2,919,180,000	2,922,112,000 11/	2,924,942,000	2,830,000
NIDCR	389,807,000	390,158,000 11/	390,535,000	377,000
NIDDK 6/	1,856,026,000	1,856,684,000 11/	1,858,487,000	1,803,000
NINDS	1,534,904,000	1,543,901,000	1,545,397,000	1,496,000
NIAID	4,366,445,000 7/	4,560,655,000	4,568,778,000	8,123,000
NIGMS	1,935,625,000	1,935,808,000	1,937,690,000	1,882,000
NICHD	1,254,144,000	1,254,708,000	1,255,920,000	1,212,000
- III	666,675,000	667,116,000	667,764,000	648,000
NIEHS	641,773,000	642,253,000	642,875,000	622,000
AIN	1,046,500,000	1,047,260,000	1,048,278,000	1,018,000
NIAMS	508,060,000	508,586,000	509,080,000	494,000
NIDCD	393,540,000	394,138,000	395,047,000	000,606
NIMI	1,403,570,000	1,405,476,000 12/	1,406,841,000	1,365,000
NIDA	1,000,014,000	1,000,700,000	1,001,672,000	972,000
NIAAA	436,057,000	436,259,000	436,681,000	422,000
NINR	137,287,000	137,476,000	137,609,000	133,000
NHGRI	486,427,000	486,779,000	487,878,000	1,099,000
NIBIB	298,391,000	298,645,000	300,254,000	1,609,000
NCRR	1,143,841,000	1,149,446,000	1,160,473,000	11,027,000
NCCAM	121,379,000	121,577,000	121,695,000	118,000
NCMHD	199,429,000	199,569,000	199,762,000	193,000
FIC	66,422,000	66,558,000	66,623,000	65,000
NLM	319,792,000 8/	320,507,000 11/	323,046,000	2,539,000
ОО	1,047,485,000 9/	1,109,099,000	1,056,797,000	-52,302,000
В&F	81,081,000	118,966,000	125,581,000	6,615,000
Type 1 Diabetes	-150,000,000	-150,000,000	-150,000,000	0
Subtotal, Labor/HHS	28,899,345,000	29,229,524,000	29,229,524,000	0
Interior/Superfund Research Progr	79,117,000	77,546,000	77,546,000	0
Total, NIH Discretionary B.A.	28,978,462,000	29,307,070,000	29,307,070,000	0
Type 1 Diabetes 7/	150,000,000	150,000,000	150,000,000	0
Total, NIH Budget Authority	29,128,462,000	29,457,070,000	29,457,070,000	0
NLM Program Evaluation	8,200,000	8,200,000	8,200,000	0
Total, Prog. Level	29,136,662,000	29,465,270,000	29,465,270,000	0
1/ Includes funds to be transferred to the Global		Find for HIV/AIDS Malaria and Tuberculosis (FV 2007 - \$99 000 000: FV 2008 - \$294 759 000: and FV 2009 - \$300 000	EY 2008 - \$294 759 000 and EY 2009	- \$300 000 000)

1/ Includes funds to be transferred to the Global Fund for HIV/AIDS, Malaria, and Tuberculosis (FY 2007 - \$99,000,000); FY 2008 - \$294,759,000; and FY 2009 - \$300,000,000).

2/ Comparable for ASAM and ASPA transfer - \$62,000.

3/ Comparable for DBEPS program transfer to NBIB (FY 2007 \$1,528,000).

4/ Comparable for CIO transfer to OC (FY 2007 \$669,000).

5/ Comparable for CIO transfer to OC (FX 1,007,3,000).

6/ Comparable for transfer to DAER (\$10,613,000).

7/ Comparable for transfer to DHS (\$10,613,000).

8/ Comparable for transfer to Advanced Development Fund to ASPR (\$49,500,000).

9/ OD comparable (\$520,929,000.

10/ Includes recession of \$520,929,000.

11/ Includes IC transfer to NIDBK from NLM to NIDCR from NLM (\$455,000).

### NATIONAL INSTITUTES OF HEALTH Budget Mechanism - Total

(Dollars in thousands)

	F	FY 2007		FY 2008		FY 2009		
MECHANISM		Actual	E	nacted	Preside	ent's Budget	Cł	nange
Research Grants:	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Projects:								
Noncompeting	26,741	\$11,005,119	26,728	\$11,193,604	26,759	\$11,169,183	31	-\$24,421
Administrative supplements	(1,633)	204,567	(1,684)	195,090	(1,776)	214,059	(92)	18,969
Competing	10,323	3,788,494	9,771	3,533,832	9,757	3,519,905	(14)	-13,927
Subtotal, RPGs	37,064	14,998,180	36,499	14,922,526	36,516	14,903,147	17	-19,379
SBIR/STTR	1,781	628,552	1,740	619,904	1,741	619,929	1	25
Subtotal, RPGs	38,845	15,626,732	38,239	15,542,430	38,257	15,523,076	18	-19,354
Research Centers:								
Specialized/comprehensive	1,193	2,237,998	1,150	2,224,836	1,155	2,231,376	5	6,540
Clinical research	88	380,981	88	418,382	72	422,893	-16	4,511
Biotechnology	109	137,148	106	124,481	102	123,854	-4	-627
Comparative medicine	54	124,146	54	121,875	60	131,330	6	9,455
Research Centers in Minority Institutions	28	53,606	28	53,579	28	53,579	0	0
Subtotal, Centers	1,472	2,933,879	1,426	2,943,153	1,417	2,963,032	-9	19,879
Other Research:								
Research careers	4,293	662,800	4,451	687,989	4,449	684,800	-2	-3,189
Cancer education	89	31,337	89	31,537	89	31,537	0	0
Cooperative clinical research	435	425,313	427	425,471	427	425,447	0	-24
Biomedical research support	188	98,312	143	63,533	144	63,533	1	0
Minority biomedical research support	165	111,310	161	110,309	161	110,309	0	0
Other	1,756	465,090	1,726	490,021	1,706	470,227	-20	-19,794
Subtotal, Other Research	6,926	1,794,162	6,997	1,808,860	6,976	1,785,853	-21	-23,007
Total Research Grants	47,243	20,354,773	46,662	20,294,443	46,650	20,271,961	-12	-22,482
D 41 142 1 4 2 T 2 2 4 4 1	FTTD				ETTD			
Ruth L. Kirschstein Training Awards:	<u>FTTPs</u>	404.045	FTTPs	400.000	<u>FTTPs</u>	100 0 10	_	4.044
Individual awards	2,982	121,215	2,997	122,029	3,004	123,340	7	1,311
Institutional awards	14,614	660,695	14,572	659,940	14,582	663,155	10	3,215
Total, Training	17,596	781,910	17,569	781,969	17,586	786,495	17	4,526
Research & development contracts	2,895	2,984,851	2,886	3,242,054	2,913	3,275,326	27	33,272
(SBIR/STTR)	(98)	(25,875)		(29,389)	· ·	(29,391)	(0)	(2)
,	(00)	, , ,	(100)	, , ,	(100)	, , ,	(0)	
Intramural research		3,034,588		3,069,277		3,119,269		49,992
Research management and support		1,316,887		1,341,060		1,361,382		20,322
Extramural Construction		14,100		0		0		0
Office of the Director 1/		473,235		523,835		431,670		-92,165
(Appropriation)		(1,047,485)		(1,109,099)		(1,056,797)		(-52,302)
Buildings and Facilities 2/		89,001		126,886		133,421		6,535
(Appropriation)		(81,081)		(118,966)		(125,581)		(6,615)
NIH Roadmap for Medical Research 3/		(483,000)		(495,608)		(533,877)		(38,269)
Type 1 Diabetes 4/		-150,000		-150,000		-150,000		` ´ Ó
Subtotal, Labor/HHS Budget Authority		28,899,345		29,229,524		29,229,524		0
Interior Appropriation for Superfund Res.	Ī	79,117		77,546	Ī	77,546		0
Total, NIH Discretionary B.A.		28,978,462		29,307,070		29,307,070		0
Type 1 Diabetes 4/		150,000		150,000		150,000		0
Total, NIH Budget Authority		29,128,462		29,457,070		29,457,070		0
NLM Program Evaluation	<del>                                     </del>	8,200		8,200		8,200		0
Total, Program Level		29,136,662		29,465,270		29,465,270		0

<sup>1/</sup> Funding for NIH Roadmap for Medical Research and for the NIH Director's Bridge Awards is distributed by mechanism. Roadmap: (funding shown above).

Bridge Awards -- FY 07: 244 awards \$91,250; FY 08: 240 awards \$89,656; FY 09: 244 awards \$91,250.

Numbers of grants identified in FY 2008 and FY 2009 are estimates, and WILL change as applications are received and selected for funding.

<sup>2/</sup> Includes the B&F appropriation plus the following included in NCI -- FY 07: \$7,920; FY 08: \$7,920; FY 09: \$7,840.

<sup>3/</sup> Included in above mechanisms

<sup>4/</sup> Included in NIDDK -- FY 07: \$150,000; FY 08: \$150,000; FY 09: \$150,000.

#### **Full-Time Equivalents**

			FY 2009
	FY 2007	FY 2008	President's
Institutes and Centers	Actual	Enacted	Budget
NCI	2,828	2,833	2,854
NHLBI	814	815	821
NIDCR	240	240	242
NIDDK	636	637	642
NINDS	517	517	525
NIAID	1,607	1,637	1,649
NIGMS	133	144	145
NICHD	560	563	567
NEI	214	214	216
NIEHS	656	658	663
NIA	383	392	395
NIAMS	215	217	219
NIDCD	134	134	135
NIMH	615	615	619
NIDA	371	375	378
NIAAA	220	220	222
NINR	40	40	40
NHGRI	286	299	301
NIBIB	85	88	88
NCRR	108	108	109
NCCAM	69	69	70
NCMHD	22	29	29
FIC	54	56	56
Subtotals, ICs	10,807	10,900	10,985
NLM	676	676	681
OD	591	591	591
Central Services	4,910	4,910	4,945
Subtotal, NIH	16,984	17,077	17,202
Undistributed	3		
Reserve		51	42
CRADA FTEs <u>1</u> /	10	10	10
Total, NIH	16,997	17,138	17,254

<sup>1/</sup> CRADA FTEs are supported by Cooperative Research and Development Agreements.